

DECLARATION AND POWER OF ATTORNEY
(Case No. HYZ-030CIP)

As below-named inventors, we hereby declare that:

Our residences, post office addresses and citizenship are as stated below next to our names.

We believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled:

A METHOD OF DOWN-REGULATING GENE EXPRESSION

the specification of which (check only one):

☐ is attached hereto.

☒ was filed as United States Patent Application
Serial No. 08/758,005
on November 27, 1996
and was amended
on _____
(if applicable)

☐ was filed as PCT Patent Application
Serial No. _____
on _____
and was amended under PCT Article 19
on _____
(if applicable)

We hereby state that we have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the patentability of the claims of this application in accordance with Title 37, Code of Federal Regulations, Sections 1.56(a) and 1.56(b).

We hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me us on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

0977526-020604

**PRIOR FOREIGN/PCT APPLICATION(S) AND ANY PRIORITY CLAIMS
UNDER 35 U.S.C. §119:**

COUNTRY (if PCT indicate PCT)	APPLICATION NUMBER	DATE OF FILING	PRIORITY CLAIMED UNDER 35 U.S.C. §119 (YES/NO)
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We hereby claim the benefit under Title 35, United States code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior applications and the national or PCT international filing date of this application:

**PRIOR U.S. APPLICATION OR PCT INTERNATIONAL APPLICATION(S)
DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. § 120:**

APPLICATION NUMBER	DATE OF FILING (day, month, year)	STATUS: (PATENTED, PENDING OR ABANDONED)
08/709,910	10 September 1996	Pending
08/328,520	25 October 1994	Pending

POWER OF ATTORNEY: As named inventors, we hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Ann-Louise Kerner, Ph.D.	Reg. No. 33,523
Wayne M. Kennard	Reg. No. 30,271
James B. Lampert	Reg. No. 24,564
Donald R. Steinberg	Reg. No. 37,241
Michael A. Diener	Reg. No. 37,122
James F. Kurkowski	Reg. No. 35,923
Wayne A. Keown, Ph.D.	Reg. No. 33,923
Hollie L. Baker	Reg. No. 31,321
Colleen Superko	Reg. No. 39,850
Richard Goldenberg	Reg. No. 38,895
Gretchen Rice	Reg. No. 37,429

the mailing address and telephone number of each of whom is HALE AND DORR, 60 State Street, Boston, Massachusetts 02109, Tel. (617) 526-6000, and Darlene A. Vanstone, Reg. No. 35,729 and Anne I. Craig, Reg. No. 32,976, the mailing address and telephone number of whom is Hybridon, Inc., 620 Memorial Drive, Cambridge, Massachusetts 02139 Tel. (617) 528-7000, with full power of substitution and revocation to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

0977525-020604

Send Correspondence to:

Ann-Louise Kerner, Ph.D.
Hale and Dorr
60 State Street
Boston, Massachusetts 02109

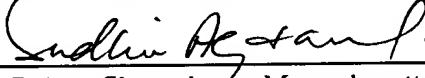
Direct Telephone Calls to:

Ann-Louise Kerner, Ph.D.
(617) 526-6000
(617) 526-5000


Wherefore we petition that letters patent be granted to us for the invention or discovery described and claimed in the attached specification and claims, and hereby subscribe our names to said specification and claims and to the foregoing declaration, power of attorney, and this petition.

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

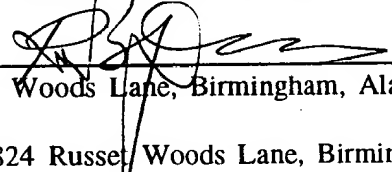
Full name of first joint inventor: Sudhir Agrawal

Inventor's signature  Date 5/5/97
Residence: 61 Lamplighter Drive, Shrewsbury, Massachusetts 01545
Citizenship: India
Post Office Address: 61 Lamplighter Drive, Shrewsbury, Massachusetts 01545

Full name of second joint inventor: Robert B. Diasio

Inventor's signature  Date 5/2/97
Residence: 1225 Branchwater Lane, Birmingham, Alabama 35216
Citizenship: U.S.A.
Post Office Address: 1225 Branchwater Lane, Birmingham, Alabama 35216

Full name of third joint inventor: Ruiwen Zhang

Inventor's signature  Date 5/2/97
Residence: 1824 Russet Woods Lane, Birmingham, Alabama 35244
Citizenship: China
Post Office Address: 1824 Russet Woods Lane, Birmingham, Alabama 35244



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

JUNE 25, 1997

PTAS

HALE AND DORR LLP
ANN-LOUISE KERNER, PH.D.
60 STATE STREET
BOSTON, MA 02109



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11003 U.S. PTO
09/777526
02/05/01

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 05/09/1997

REEL/FRAME: 8507/0358
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
AGRAWAL, SUDHIR

DOC DATE: 05/05/1997

ASSIGNOR:
DIASIO, ROBERT B.

DOC DATE: 05/02/1997

ASSIGNOR:
ZHANG, RUIWEN

DOC DATE: 05/02/1997

ASSIGNEE:
HYBRIDON, INC.
620 MEMORIAL DRIVE
CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER: 08758005
PATENT NUMBER:

FILING DATE: 11/27/1996
ISSUE DATE:

FILED

JUN 30 1997

FILED

8507/0358 PAGE 2

MAYA BENNETT, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

05-20-1997

FORM PTO-1595

(Rev. 6-93)

OMB No. 0651-0011 (exp. 4/94)

Tab settings ☐ ☐ ☐ ☐ ▼

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VER
LYU.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

MAY 09 1997

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents **RECEIVED**1. Name of conveying party(ies): **5-9-97**Sudhir Agrawal
Robert B. Diasio
Ruiwen ZhangAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies)

Name: Hybridon, Inc.

Internal Address: _____

Street Address: 620 Memorial Drive

City: Cambridge State: MA ZIP: 02139

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other _____

Execution Date: May 2, 1997

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)

08/758,005

B. Patent No.(s)

Additional numbers attached? ☒ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Ann-Louise Kerner, Ph.D.

Internal Address: Hale and Dorr LLP

Street Address: 60 State Street

City: Boston State: MA ZIP: 02109

6. Total number of applications and patents involved: **1**

7. Total fee (37 CFR 3.41).....\$ 40.00

☒ Enclosed☐ Authorized to be charged to deposit account

8. Deposit account number: _____

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Richard A. Goldenberg

Name of Person Signing

Richard A. Goldenberg
Signature

May 6, 1997

Date

Total number of pages including cover sheet, attachments, and document: **4**Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments

ASSIGNMENT

Case No.: HYZ-030CIP

Serial No.: 08/758,005

Inventors: Sudhir Agrawal, Robert B. Diasio, and Ruiwen Zhang

Date of Execution
of Application: _____

Filing Date: November 27, 1996

In consideration of One Dollar (\$1.00) and other good and valuable consideration in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

HYBRIDON, INC.

its successors and assign, the entire right, title, and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

"A METHOD OF DOWN-REGULATING GENE EXPRESSION"

and identified as:

Case No. HYZ-030CIP

in the offices of Hale and Dorr LLP and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assign to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known.

The undersigned warrant themselves to be the owners of the entire right, title, and interest in said invention or improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said consideration the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be

granted upon said application and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said consideration the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignees, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignees, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignees, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

WITNESS my hand and seal this 5th day of May, 1997.

Sudhir Agrawal
Sudhir Agrawal

State of Massachusetts

County of Middlesex

The foregoing instrument was acknowledged before me this 5th day of

May, 1997 by Sudhir Agrawal

Quana Miller Doyle
NOTARY PUBLIC

WITNESS my hand and seal this 2 day of May, 1997.

Robert B Diasio
Robert B. Diasio

State of Massachusetts
County of Middlesex

The foregoing instrument was acknowledged before me this 2nd day of
May, 1997 by Robert B. Diasio

James Muller Dayle
NOTARY PUBLIC

WITNESS my hand and seal this 2nd day of May, 1997.

Ruiwen Zhang
Ruiwen Zhang

State of Massachusetts
County of Middlesex

The foregoing instrument was acknowledged before me this 2nd day of
May, 1997 by Ruiwen Zhang

James Muller Dayle
NOTARY PUBLIC